

IN THE CLAIMS

Please amend the Claims as shown below:

1. (Currently Amended) In a computer system that provides an audio user interface, a method of interfacing with a user comprising the steps of:

a) audibly prompting a user with a first message indicating that the user may say a keyword to invoke an application and indicating that the user may stay tuned for a listing of keywords;

b) waiting for a predetermined period for said user to say a keyword;

c) provided said user does say a keyword during said predetermined period, automatically recognizing said keyword and executing an application indicated by said keyword; and

d) provided said user does not say a keyword during said predetermined period, audibly rendering a listing of keywords to said user and executing an application associated with a keyword spoken by said user in response to said listing.

2. (Original) A method as described in Claim 1 wherein said step d) comprises the steps of:

d1) rendering a first set of said listing to said user;

d2) waiting for said predetermined period for said user to say a keyword;

d3) provided said user does say a keyword during said predetermined period of step d2), executing an application indicated by said keyword; and

d4) provided said user does not say a keyword during said predetermined period of step d2), rendering a second set of said listing to said user and again waiting for said predetermined period for said user to say a keyword.

3. (Original) A method as described in Claim 1 wherein said step d) comprises the steps of:

d1) rendering a second message stating that if the user knows his/her keyword, the user can say the keyword at any time; and

d2) rendering said listing of keywords to said user.

4. (Original) A method as described in Claim 1 further comprising the step of rendering a background audible signal during said predetermined period.

5. (Original) A method as described in Claim 4 wherein said audible signal is music.

6. (Original) A method as described in Claim 1 further comprising the step of rendering a suggestion to said user for said user to try a particular application and further suggesting its keyword, said step of rendering a suggestion performed before said step a).

7. (Original) A method as described in Claim 6 wherein said suggestion is rotated on each pass-through by said user.

8. (Original) A method as described in Claim 6 wherein said suggestion is rotated to suggest keywords not yet selected by said user.

9. (Original) A method as described in Claim 1 further comprising the step of rendering a greeting message to said user, said step of rendering a greeting message performed before said step a).

10. (Original) A method as described in Claim 9 wherein said greeting message is rotated on each pass-through by said user and also based on a time of day.

11. (Original) A method as described in Claim 9 wherein said greeting message is rotated to supply same words but with differences in prosody.

12. (Original) A method as described in Claim 9 wherein said greeting message is rotated to provide different greeting words.

13. (Original) A method as described in Claim 1 wherein said step c) comprises the steps of:

c1) playing a message indicating that when the user is done with said application they can say a menu keyword at any time;

c2) executing said application; and

c3) exiting said application in response to said user saying said menu keyword.

14. (Currently Amended) A computer system comprising:

a processor coupled to bus; a memory coupled to said bus; and communication channels for providing audio user interfaces, wherein said memory has stored therein instructions for implementing a method of interfacing with a user, said method comprising the steps of:

a) audibly prompting a user with a first message indicating that the user may say a keyword to invoke an application and indicating that the user may stay tuned for a listing of keywords;

b) waiting for a predetermined period for said user to say a keyword;

c) provided said user does say a keyword during said predetermined period, automatically recognizing said keyword and executing an application indicated by said keyword; and

d) provided said user does not say a keyword during said predetermined period, audibly rendering a listing of keywords to said user and executing an application associated with a keyword spoken by said user in response to said listing.

15. (Original) A computer system as described in Claim 14 wherein said step d) comprises the steps of:

d1) rendering a first set of said listing to said user;

d2) waiting for said predetermined period for said user to say a keyword;

d3) provided said user does say a keyword during said predetermined period of step d2), executing an application indicated by said keyword; and

d4) provided said user does not say a keyword during said predetermined period of step d2), rendering a second set of said listing to said user and again waiting for said predetermined period for said user to say a keyword.

16. (Original) A computer system as described in Claim 14 wherein said step d) comprises the steps of:

d1) rendering a second message stating that if the user knows his/her keyword, the user can say the keyword at any time; and

d2) rendering said listing of keywords to said user.

17. (Original) A computer system as described in Claim 14 wherein said method further comprises the step of rendering a background audible signal during said predetermined period.

18. (Original) A computer system as described in Claim 17 wherein said audible signal is music.

19. (Original) A computer system as described in Claim 14 further comprising the step of rendering a suggestion to said user for said user to try a particular application and further suggesting its keyword, said step of rendering a suggestion performed before said step a).

20. (Original) A computer system as described in Claim 19 wherein said suggestion is rotated on each pass-through by said user.

21. (Original) A computer system as described in Claim 19 wherein said suggestion is rotated to provide keywords not yet selected by said user.

22. (Original) A computer system as described in Claim 14 further comprising the step of rendering a greeting message to said user, said step of rendering a greeting message performed before said step a).

23. (Original) A computer system as described in Claim 22 wherein said greeting message is rotated on each pass-through by said user and also based on a time of day.

24. (Original) A computer system as described in Claim 22 wherein said greeting message is rotated to provide differences in prosody.

25. (Original) A computer system as described in Claim 22 wherein said greeting message is rotated to provide different greeting words.

26. (Original) A computer system as described in Claim 14 wherein said step c) comprises the steps of:

c1) playing a message indicating that when the user is done with said application they can say a menu keyword at any time;

c2) executing said application; and

c3) exiting said application in response to said user saying said menu keyword.

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Currently Amended) In a computer system that provides an audio user interface, a method of providing information to a user comprising the steps of:

a) entering a general mode of operation within said audio user interface wherein a user can interrupt said computer system by uttering keywords at any time;

b) in response to said user saying a keyword that invokes a content delivery option, audibly rendering a message informing said user that content delivery can be interrupted by uttering a special word;

c) playing an audio content to said user;

d) during step c), entering a special mode of operation wherein said audio content is interrupted only if said user says said special word and otherwise ignoring user utterances during said playing of said audio content; and

e) resuming said general mode of operation upon completion of said audio content.

35. (Original) A method as described in Claim 34 further comprising the step of playing a first background audio signal, in conjunction with said audio content, during said step c) to indicate said special mode of operation.

36. (Original) A method as described in Claim 35 wherein said audio signal is music.

37. (Original) A method as described in Claim 35 further comprising the step of playing a second background audio signal in response to a user utterance made during said special mode of operation, said second background audio signal played in conjunction with said audio content and indicating that said computer system heard and is processing said utterance.

38. (Original) In a computer system having an audio user interface, a method of providing information to a user comprising the steps of:

a) automatically determining a default location based on a characteristic of a caller;

b) rendering a first message to said caller that information of a first category will be provided to said caller using said default location unless said caller indicates a new location;

c) pausing a predetermined period for said caller to say a new location and rendering a background audio signal during said pausing;

d) provided said user does not indicate a new location, rendering to said caller information of said first category that is pertinent to said default location; and

e) provided said user does indicate a new location, rendering to said caller information of said first category that is pertinent to said new location.

39. (Original) A method as described in Claim 38 wherein said characteristic is caller identification (caller ID) data regarding said caller and wherein said locations are cities.

40. (Original) A method as described in Claim 38 wherein said audio signal is music.

41. (Original) A method as described in Claim 38 further comprising the steps of:

f) rendering a second message to said caller that information of a second category will be provided to said caller using said location on which first category information was rendered unless said caller indicates another location;

g) pausing a predetermined period for said caller to say a second location and rendering a background audio signal during said pausing;

h) provided said user does not indicate said second location, rendering to said caller information of said second category that is pertinent to said location on which first category information was rendered; and

i) provided said user does indicate said second location, rendering to said caller information of said second category that is pertinent to said second location.

42. (Original) A method as described in Claim 41 wherein said first and said second categories are related.

43. (Original) A method as described in Claim 42 wherein steps f) - i) are executed automatically after steps a) - d) and said second category is automatically determined by computer control.

44. (Currently Amended) In a computer system, a method for providing an audio user interface, said method comprising the steps of:

a) receiving a user utterance;

b) processing said user utterance using automatic voice recognition processes;

c) if said user utterance is a mismatch, entering a first process to determine if conditions exist that are likely to lead to poor voice recognition; and

d) if said conditions do not exist then re-prompting said user with an audible prompt and repeating steps a) - c), otherwise, entering a second process to provide services and audible user suggestions directed at raising the likelihood of receiving commands and data from said user.

45. (Original) A method as described in Claim 44 wherein said first process comprises the steps of:

determining said conditions exist if a predetermined number of mismatched utterances are received in a row;

determining said conditions exist if a predetermined percentage of mismatched utterances are received based on all user utterances within in a given call; and

determining said conditions exist if a predetermined threshold of background signals is detected in said call.

46. (Original) A method as described in Claim 45 wherein said first process further comprises the steps of:

determining said conditions exist if said user utterance is longer than a predetermined duration;

determining said conditions exist if said user utterance is louder than a predetermined loudness threshold; and

determining said conditions exist if a decoy word is detected within said user utterance.

47. (Original) A method as described in Claim 46 wherein said first process further comprises the step of determining said conditions exist if a predetermined level of non-human speech is detected.

48. (Original) A method as described in Claim 47 wherein said first process further comprises the steps of:

applying a tolerance threshold for determining whether said conditions exist; and
adjusting said tolerance threshold if said user is using a wireless phone for said call.

49. (Original) A method as described in Claim 44 wherein said second process comprises the steps of:

a) rendering a message that said computer is having trouble understanding said user; and

b) rendering a message informing said user of suggestions on how to be better understood;

50. (Original) A method as described in Claim 49 wherein said second process further comprises the step of c) entering a special mode of operation where only keypad user entry is allowed.

51. (Original) A method as described in Claim 49 wherein said second process further comprises the step of c) entering a push-to-talk mode of operation.

52. (Original) A method as described in Claim 49 wherein said second process further comprises the step of c) raising the barge-in threshold.

53. (Currently Amended) In a computer system, a method for providing an audio user interface, said method comprising the steps of:

- a) on receiving a call over a telephone gateway, using an Automatic Number Information (ANI) of said call to determine if said call is using a wireless phone;
- b) provided said call is using a wireless phone, raising a barge-in threshold;
- c) detecting a user utterance when sounds of said call exceed said barge-in threshold;
- d) processing said user utterance using automatic voice recognition processes;
- e) if said user utterance is a mismatch, entering a first process to determine if conditions exist that are likely to lead to poor voice recognition; and
- f) if said conditions do not exist, then re-prompting said user with an audible prompt and repeating steps c) - e), otherwise, entering a second process to provide services and audible user suggestions directed at raising the likelihood of receiving commands and data from said user.

54. (Currently Amended) In a computer system, a method for providing an audio user interface, said method comprising the steps of:

- a) on receiving a call over a telephone gateway, using an Automatic Number Information (ANI) of said call to determine if said call is using a wireless phone;
- b) provided said call is using a wireless phone, raising a confidence rejection threshold used in automatic voice recognition processes;
- c) detecting a user utterance;
- d) processing said user utterance using said automatic voice recognition processes, wherein increasing said confidence rejection threshold means a higher confidence is required to be associated with a hypothesis before said automatic voice recognition processes consider a spoken word of said utterance to have been matched;
- e) if said user utterance is a mismatch, entering a first process to determine if conditions exist that are likely to lead to poor voice recognition; and
- f) if said conditions do not exist, then re-prompting said user with an audible prompt and repeating steps c) - e), otherwise, entering a second process to provide services and audible user suggestions directed at raising the likelihood of receiving commands and data from said user.

55. (Cancelled)

56. (Cancelled)

57. (Cancelled)

58. (Cancelled)

59. (Cancelled)

60. (Cancelled)